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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/923,531	08/08/2001	Terry J. Logan	10465/41	2122

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EXAMINER	
SAYALA, CHHAYA D	

ART UNIT	PAPER NUMBER
1761	

DATE MAILED: 10/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/923,531	Applicant(s) LOGAN ET AL.
	Examiner C. SAYALA	Art Unit 1761

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____ .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-27 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-27 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6 .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 26 and 27 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 26 and 27 are indefinite because "system" is not a statutory class. The various classes are process, apparatus, manufacture or composition (see 35 USC 101). For purposes of this examination, these claims are being considered as method claims and should be so amended. If they are re-designated as "apparatus" claims by applicant, they will be restricted because there is no provision for "apparatus" in class 71 (fertilizers), and these claims will be deemed to have acquired a different classification for examination purposes.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Burnham (US Patent 5135664) and Burnham (US Patent 5853590) in view of W097/21647, Nicholson (US Patent 4554002) and Nicholson et al (US Patent 4902431).

Both patents to Burnham teach mixing wastewater sludge with cement kiln dust, gypsum, fly ash (see col. 4, lines 55-65 in '664) and then heating and drying this mixture. Col 5, lines 30-40 in '664. The process is said to stabilize the waste, remove odors and pathogens. The patents teach using a pH of 12, not as instantly claimed herein, "less than about 9". Note, however, that the patent suggests that the pH should be reduced to below 10 to prevent emission of ammonia (see abstract). In '590, see the abstract, col 6 and col 8. Note that this patent teaches that the process promotes the bio-granularity of the product. The patent does not teach using a combination of mineral by-products.

WO'647 teaches that by adjusting the pH to an optimum of 9.5 or in a range 7.0 – 9.5 (see claim 3) in a process which stabilizes animal manure by adding combustion by-product, cement kiln dust and fly ash (see claims 3-5). The patent teaches that the benefit of keeping the above-mentioned pH range is that it minimizes the release of ammonia and hydrogen sulfide, which are two of the principal odor causing factors. The patent teaches that suppressing such odors stabilizes the product for its use as a fertilizer (see page 4, lines 25-37). Nicholson '002 teaches "the controlled addition of

substantial monitored quantities of an industrial waste product (kiln dust from cement or lime plants) to waste watersludge either during the in-plant processing or after it has been processed at the treatment plant, can dramatically improve the characteristics of the sludge". The patent also teaches that raising the pH above 9.0 will cause the release of ammonia (see col 10, lines 25-30). The patent advocates the use of fly ash or gypsum to be beneficial. Nicholson et al '431, teach that using a combination of mineral by-products listed at col 6, lines 15-25, helps to chemically stabilize waste (see also col 5).

It would have been obvious to one of ordinary skill in the art to maintain a pH as taught by the WO patent (see page 13, line 12) to suppress release of ammonia, also taught by the '002 patent, which would stabilize the product for its use as a soil additive or fertilizer. Also, to achieve chemical stabilization by using "the most economical system" (see '431), a combination of mineral by-products would have been the obvious expedient, given the teachings of '431.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double

patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1-27 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-25 of U.S. Patent No. 6248148 in view of W097/21647 and Nicholson et al (US Patent 4902431).

Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims vary in scope only and not subject matter. Note reference claims 12 and 22, in particular. Claim 1 recitation "*approximately* 9.5" overlaps with the instant claim recitation. The WO reference teaches the benefits of maintaining a pH that is claimed now. The Nicholson et al. patent teaches the benefits of using a combination of by-products. It would have been obvious to modify the '148 patent according to the teachings of the secondary references.

4. Claims 1-27 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-25 of U.S. Patent No. 6405664 in view of W097/21647 and Nicholson et al (US Patent 4902431).

The process of the patent mixes organic waste with combustion by-products claimed in claim 4. The pH is taught as "at least 9.5". The WO reference teaches the benefits of maintaining a pH that is claimed now. The Nicholson et al. patent teaches

the benefits of using a combination of by-products. It would have been obvious to modify the '664 patent according to the teachings of the secondary references.

5. Claims 1-27 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-16 of U.S. Patent No. 6402801 in view of Nicholson et al (US Patent 4902431).

The claimed invention recites claim language which encompasses the same steps, which is, adding mineral by-products and maintaining the pH in the same range. The Nicholson et al. patent teaches the benefits of using a combination of by-products. It would have been obvious to modify the '801 patent according to the teachings of the secondary reference.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to C. SAYALA at Group 1761, telephone number (703) 308-3035.

The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is 703-308-0661.

CHHAYA SAYALA
PRIMARY EXAMINER